Highlighting place-based student research: a project to enhance discoverability of SSU MA theses with regional content.

Place-based education has long been an important, if not always explicit, part of the educational experience at SSU. The University's six-county service area has proven to be fertile ground for intensive and invigorating inquiry, from master’s-level research on local watersheds, to undergraduate research projects on social and cultural issues, to field trips to the SSU Preserves, to internships with local businesses, and student teaching in local schools. Both students and the local community benefit from this “pedagogy of place,” and would derive greater benefit if the results of this research were easier to discover.

In the library and information studies literature, “discoverability” is a key concept, and sparked these questions for me:

- How can we enhance the metadata in library records to provide more relevant search results?
- What geographic information can we add to better tie the research to the local region?
- How can we display that information through engaging online exhibits that can be easily accessed and linked to?
- How can we make this rich body of information and research more accessible and usable, moving it beyond the confines of a dusty volume sitting on a library shelf?

The library houses over 160 SSU MA theses in biology, many of which involve research on the local region, some available in electronic format, but most only in print. One sample title, *Community-level Effects of a Dominant Shrub Across an Environmental Gradient: Variable Reponses of Native and Exotic Plants*, illustrates a few of the issues. While capturing the macro-level concepts well, neither the title nor the metadata in the Library record mentions the geographic region (Bodega Bay), or the name of the species being studied, or that the research was on sand dune ecosystems. The single subject heading in the Library's catalog was “California plant communities,” which is very general. Someone searching for information on these topics – for example, sand dunes – would likely not find this thesis, especially if it was available only in print.

This sabbatical project focused on making a subsection of the SSU thesis collection easier to find. I created a process to do so in three ways:

* The University Library’s RTP Criteria call for librarians to “pursue activities that support the Library’s strategic goals,” and that “a librarian’s contributions will be primarily focused on the application of theory to practice.”
(1) by enriching metadata and description
(2) by identifying geolocation coordinates to map the research, and
(3) by improving access to these theses in print and electronic formats.

I chose a subset of biology theses with regional content as a pilot project in order to better understand the issues involved, to determine the technology most amenable to mapping the theses, and to create a process and product that could be easily updated and incorporated into standard work practices.

Close physical examination of the biology theses helped me identify those with regional content (~130 of ~160), determine where the research was conducted, and create a spreadsheet of relevant available metadata for the titles of interest. I examined several possible approaches and decided to move in the direction of trying to make the project sustainable and easy to update, rather than creating a one-time project with a limited life span.

I considered harmonizing the metadata between two disparate systems, ScholarWorks (SSU’s institutional repository, which uses Dublin Core) and the Library’s catalog (which uses LCSH and MARC), but decided it would be more useful to create and add keyword-rich abstracts to the catalog record and link when available to the electronic version in ScholarWorks. By examining search logs, I was able to verify that keyword searching is the primary way our users search. In creating the abstracts, I included specific geographic locations, species names, and any broad terms that might enhance discoverability, (e.g., “sand dune ecologies”).

I worked with a student employee in Special Collections (a graduate student in history with a genuine interest in the topic) to determine geolocation coordinates. We looked first for any coordinates specified in the thesis or for names of specific identifiable locations. In the case of multiple locations, we chose the top five to map. In some instances the locations named were very specific (e.g., Bodega Marine Lab), while others were more general (e.g., Bodega Bay). For the general locations we simply chose coordinates that would assist readers finding the general area.

In consultation with the Special Collections and Digital Collections librarians, I soon discovered many opportunities for collaboration based on projects they were already pursuing, which created a synergistic effect that pushed several related initiatives forward. Examples include:

- In the course of my work I helped identify titles to be added to the electronic thesis collection in ScholarWorks and to the Regional scope in the catalog.
- We discussed possible changes to practice that could make this project sustainable and expandable in the future.
• The various issues we discovered in determining usable coordinates helped us to set some parameters to use for geolocation tagging in future projects.
• Once I created the abstract for each thesis, a staff member in Special Collections added it, as well as other relevant metadata, to the catalog records, expanding her experience in a new area.
• I had identified some possible mapping software and soon discovered that another staff person had already been investigating one of the possibilities (Google Fusion) as a solution to another project. She provided the technical expertise to set up the mapping portion of my project.
• We all worked with the CSU library technology group to implement embedding dynamic maps into an open access digital archive software, thereby making it available to other campuses, and helping to move a statewide project forward.

The resulting project from this sabbatical can be seen at https://scholarworks.calstate.edu/handle/10211.3/135943. It includes a dynamic map of SSU biology MA theses with regional content, enhanced catalog records with keyword-rich abstracts and regional scoping, links to the full text when available, and a sortable spreadsheet of all the biology theses with regional content. A working document internal to the Library will also make recommendations for possible changes in practice to accommodate new theses as they are submitted.

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